WHAT IS CLAIMED IS

1. A resource load measuring method for measuring load information of resources within a network, comprising:

measuring the load information of the resources at measuring intervals and storing measured load information in a storage section;

predicting load information of the resources according to a prediction algorithm and storing predicted load information in the storage section; and

adjusting the measuring intervals based on the measured load information and the predicted load information stored in the storage section.

2. The resource load measuring method as claimed in claim 1, wherein the predicted load information is predicted based on time-varying information in the measured load information.

3. The resource load measuring method as claimed in claim 1, wherein the predicted load information is predicted based on at least one error between present measured load information and previous measured load information.

4. The resource load measuring method as claimed in claim 1, wherein the measuring intervals are adjusted based on at least one error between the measured load information and the predicted load information.

5. The resource load measuring method as claimed in claim 1, wherein the measuring, the predicting and the adjusting are carried out by a network control apparatus within the network, and the resources include communication nodes within the network.

6. The resource load measuring method as claimed in claim 1, wherein the measuring, the predicting and the adjusting are carried out by a communication node within the network, in response to an instruction from a network control apparatus within the network, and the resources are provided within communication node.

7. A network control apparatus coupled within a network having resources and controlling the network, comprising:

a storage section;

a measuring section to measure load information of the resources at measuring intervals and to store measured load information in the storage section;

a predicting section to predict load information of the resources according to a prediction algorithm and to store predicted load information in the storage section; and

an adjusting section to adjust the measuring intervals based on the measured load information and the predicted load information stored in the storage section.

8. The network control apparatus as claimed in claim 7, wherein said predicting section predicts the predicted load information based on time-varying information in the measured load information.

9. The network control apparatus as claimed in claim 7, wherein said predicting section predicts the predicted load information based on at least one error between present measured load information and previous measured load information.

10. The network control apparatus as claimed in claim 7, wherein said adjusting section adjusts the measuring intervals based on at least one error between the measured load information and the predicted load information.

11. A communication node coupled within a network having a network control apparatus, comprising:

a plurality of resources;

a storage section;

a measuring section to measure load information of the resources at measuring intervals and to store measured load information in the storage section;

a predicting section to predict load information of the resources according to a prediction algorithm and to store predicted load information in the storage section; and

an adjusting section to adjust the measuring intervals based on the measured load information and the predicted load information stored in the storage section, in response to an instruction from the network control apparatus.

12. The communication node as claimed in claim 11, wherein said predicting section predicts the predicted load information based on time-varying information in the measured load information.

13. The communication node as claimed in claim 11, wherein said predicting section predicts the predicted load information based on at least one error between present measured load information and previous measured load information.

14. The communication node as claimed in claim 11, wherein said adjusting section adjusts the measuring intervals based on at least one error between the measured load information and the predicted load information.

15. A computer-readable storage medium which stores a computer program for causing a computer to measure load information of resources within a network, said computer program comprising:

a procedure to cause the computer to measure the load information of the resources at measuring intervals and to store measured load information in a storage section;

a procedure to cause the computer to predict load information of the resources according to a prediction algorithm and to store predicted load information in the storage section; and

a procedure to cause the computer to adjust the measuring intervals based on the measured load information and the predicted load information stored in the storage section.

16. The computer-readable storage medium as claimed in claim 15, wherein the predicted load information is predicted based on time-varying information in the measured load information.

17. The computer-readable storage medium as claimed in claim 15, wherein the predicted load information is predicted based on at least one error between present measured load information and previous measured load information.

18. The computer-readable storage medium as claimed in claim 15, wherein the measuring intervals are adjusted based on at least one error between the measured load information and the predicted load information.

19. The computer-readable storage medium as claimed in claim 15, wherein the measuring, the predicting and the adjusting procedures are carried out within the computer which forms a network control apparatus within the network, and the resources include communication nodes within the network.

20. The computer-readable storage medium as claimed in claim 15, wherein the measuring, the predicting and the adjusting procedures are carried out by the computer which forms a communication node within the network, in response to an instruction from a network control apparatus within the network, and the resources are provided within communication node.